Course Description

Course Code	YZ 107
Course Name	PROGRAMMING I
Prerequisite Courses	
Language of the Course	The English
Course Coordinator	
Instructor(s)	
Course Assistants	
The aim of the course	The objectives of this course are to make up a basic understanding of programming concepts and using these programming concepts in C language. At the end of this course, students should be able to: 1. Know the importance of computer programming, 2. Explain the general form and concepts of C programming language, and 3. Describe the code development using C programming language.
Course Content	Algorithms, flowcharts, introduction to computer programming, the general form and concepts of C programming language, fundamentals of code development using C programming language, statements and operators in C, problem-solving, assignment and input/output statements, selection structures and loops, functions, pointers, arrays, strings, text file operations, and etc.

Weekly Course Content

Week 1	Main units of a computer
Week 2	Algorithms and flow chars - 1
Week 3	Algorithms and flow chars - 2
Week 4	Assignment and input/output statements
Week 5	Conditional statements
Week 6	Loops
Week 7	Functions - 1
Week 8	Midterm exam.
Week 9	Functions - 2
Week 10	Pointers
Week 11	Arrays
Week12	Strings
Week 13	Structs and unions
Week 14	Text file operations
Week 15	Final exam.

Course Learning Outcomes

1	Apply math, science and engineering knowledge into computer programming
2	Analyzing and formulation of engineering problems and gain programming ability

Contribution of the Course to Program Qualifications

		Contribution Level
01	The student will have the ability to apply analytical approach, mathematics and science knowledge in software and engineering issues.	4
02	The student will have the ability to identify, define, formulate and solve a problem in software and computer systems.	2
03	The student will have gains scientific research skills in software and engineering problems, has the ability to design a system, part or process.	5
04	The student will have the ability to use the design capability, techniques and tools required for engineering applications.	3
05	The student will have the ability to design, implement and interpret experimental work and software projects by analyzing the results.	5
06	The student will have the ability to work between disciplines and teamwork.	5
07	The student will have the ability to work in international environments and adapt to different cultures.	5
08	The student will have verbal and written communication skills in Turkish and English.	4
09	The student will have the awareness of the necessity of lifelong learning and the ability to realize it.	3
10	The student will gain knowledge of legal issues with the awareness of professional and ethical responsibility.	3
11	The student will have managerial skills (leadership, organization, time and risk management, quality awareness, efficiency, etc.).	3
12	The student will have the ability to participate in social activities, to acquire regular sports habits and to use time in the best way.	4
13	The student will have the ability to find unusual ways and produce projects.	4
14	The student will have professional self-confidence, being an entrepreneur and taking initiative.	5
15	It is sensitive about the problems of the age and looks after the national interests.	4

ECTS WORKLOAD

	Number	Duration (hours)	Number*Duration
Face to face education	14	3	42
Out-of-class study time (pre-study, reinforcement)	14	2	28
Homeworks	7	1	7
Presentation / Seminar preparation	2	1	2
Quizzes	7	1	7
Preparation for midterm exams	1	17	17
midterm exams	1	2	2
Project (Semester assignment)	0	0	0
Lab	9	1	9
field work	0	0	0
Preparation for the final exam	1	20	20
Semester final exam	1	2	2
Research	6	1	6
TOTAL WORKLOAD			**144**
ECTS			**5**

Evaluation

SEMESTER EVALUATION	Number	Contribution Percentage
Midterm	1	45
Quiz	2	20
Homework	7	35
SEMESTER TOTAL		**100**
Contribution rate of mid-term evaluations to success		40
Contribution rate of the final exam to success		60
GRAND TOTAL		**100**

RESOURCES

Textbook	N.E. Çağıltay, F.C. Selbes, G.Tokdemir, Ç. Turhan, "C Dersi Programlamaya Giriş", 3. Baskı, Ankara, 2009.
Helpful Resources	--